

# **Grants Mining District, New Mexico**

## **2015 – 2020 Five-Year Plan to Assess and Address Health and Environmental Impacts of Uranium Mining and Milling**





# Objectives & Goals for 2015-2020 Five-Year Plan for Grants Mining District

- Includes: Accomplishments from 2010 Five-Year Plan for Grants Mining District





# Assess Water Supply Sources

- Sampled private water wells
- Sampled public water supplies
- Sampled existing and new monitoring wells





# Assess and Cleanup of Legacy Uranium Mines

- Compiled existing information
- Conducted assessments of mines
- Prioritized sites for response
- Developing protocols for characterization and cleanup





# Assess, Cleanup, Long-Term Management of Former Uranium Mills

- Continued inspections and sampling groundwater
- Filled data gaps at Anaconda Bluewater Mill and Ambrosia Lake-Phillips Mill

Image NMRGIS  
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# Communication/Coordination on Community Issues

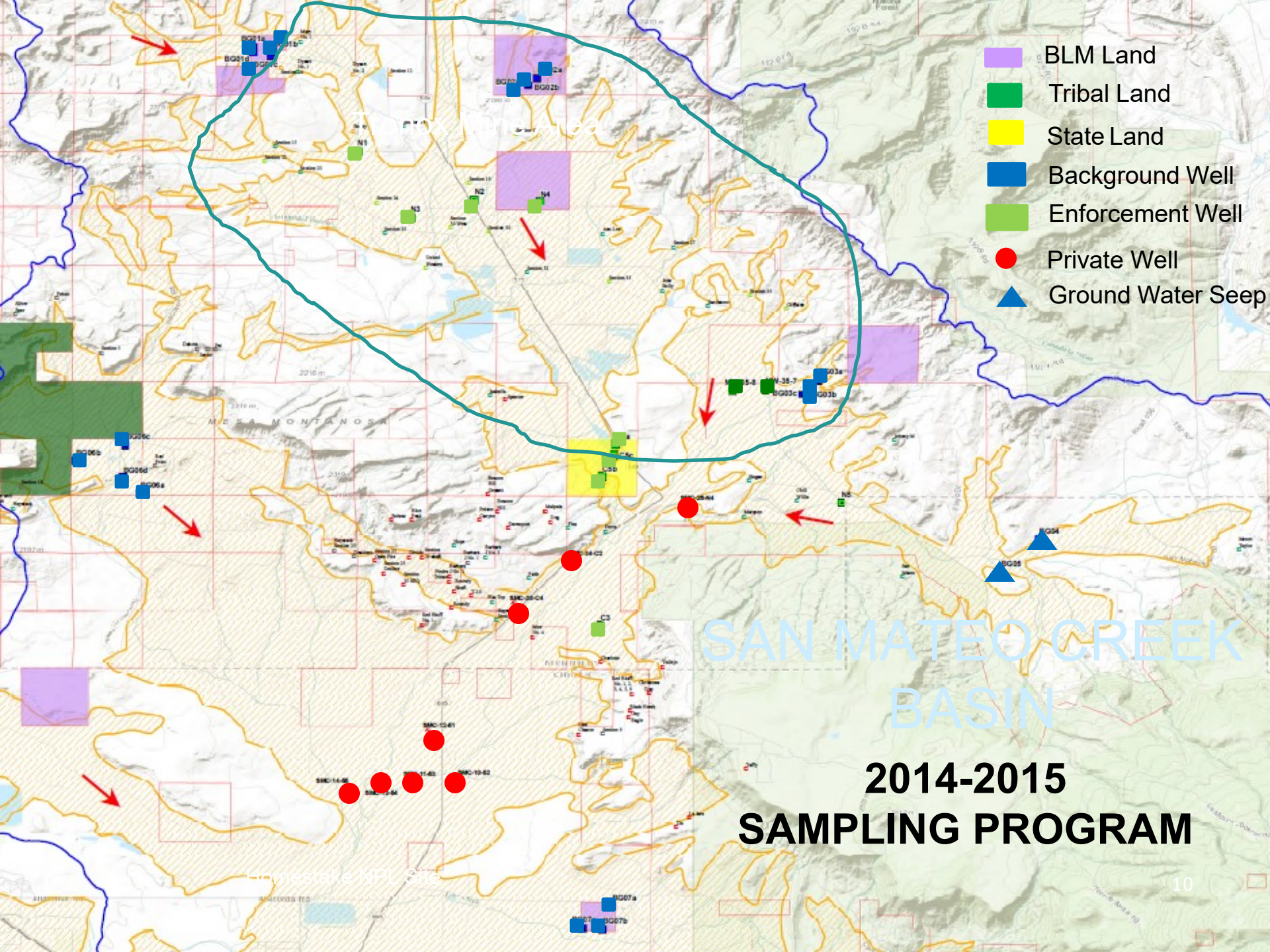




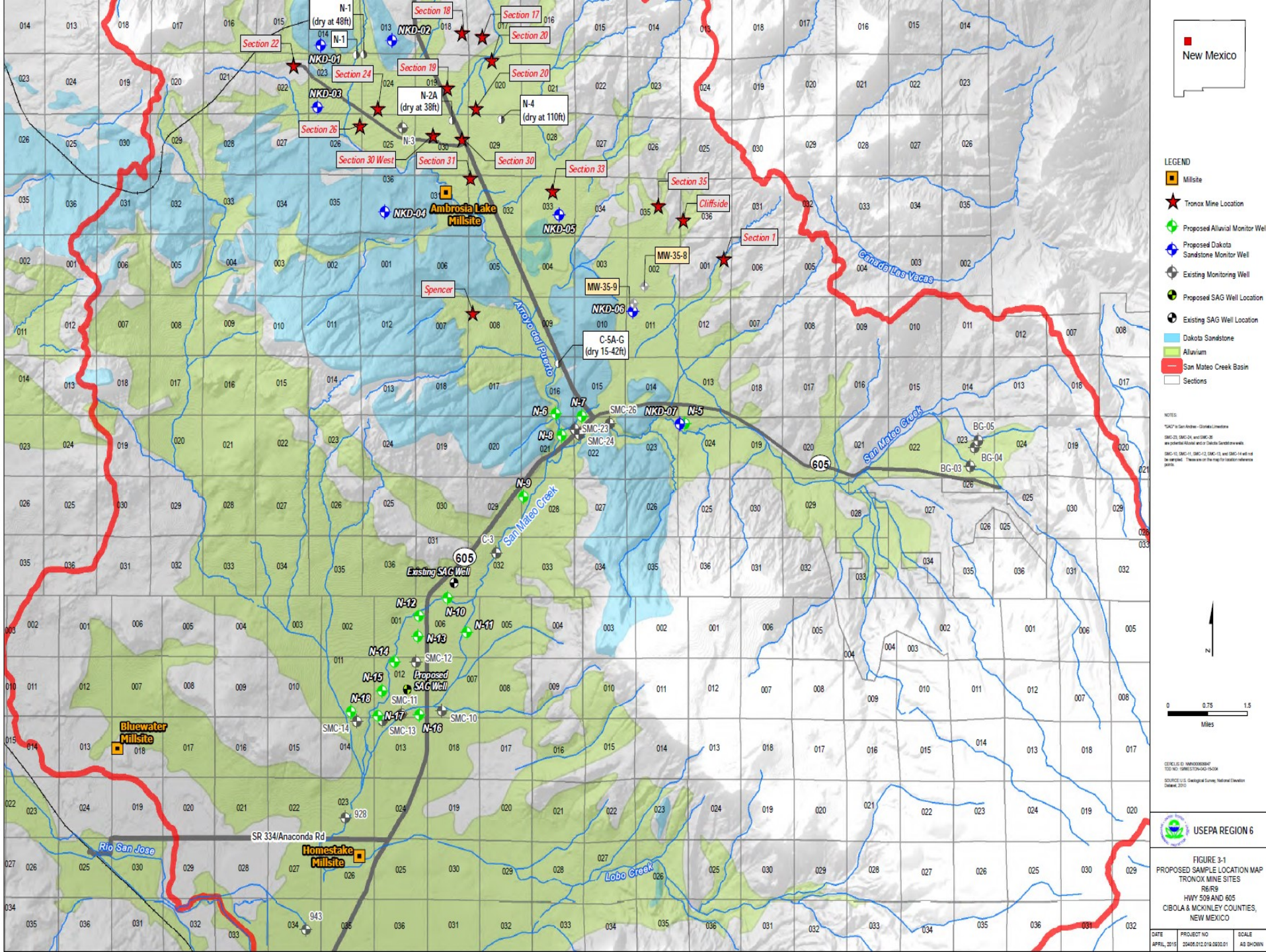
2010 – 2015 Plan		2015 – 2020 Plan	
Goals	Accomplished	Goals	
<u>Water Supply Sources</u>  – Evaluate private well groundwater quality          – Evaluate public water supplies	<ul style="list-style-type: none"><li>– 32 private wells sampled (2009 &amp; 2010)<ul style="list-style-type: none"><li>• 23 wells exceed drinking water standards for at least one or more constituent</li></ul></li><li>– 43 private wells sampled (2014 &amp; 2015)<ul style="list-style-type: none"><li>• 26 wells exceed drinking water standards for at least one or more constituent</li></ul></li><li>– 3 Milan public water supply wells sampled<ul style="list-style-type: none"><li>• all wells meet drinking water standards</li></ul></li></ul>	<ul style="list-style-type: none"><li>– In 2015, issue EPA and NMED Groundwater Assessment Reports</li><li>– In 2018, issue conceptual site model; is a tool to understand impacts of legacy uranium mining and milling on surface water and groundwater systems in San Mateo Creek basin</li></ul>	
<u>Legacy Uranium Mines</u>  – Compile existing information     – Assess mine impact areas     – Evaluate Jackpile for NPL	<ul style="list-style-type: none"><li>– 97 mines assessed<ul style="list-style-type: none"><li>• aerial gamma survey</li><li>• screening assessments</li><li>• 10 investigations – Dysart #2, John Bully, Johnny M, Marquez, Mary #1,Sandstone, Sections 10,12,15,30</li><li>• 1 cleanup – San Mateo Mine</li></ul></li><li>– Jackpile on NPL December 2013</li></ul>	<ul style="list-style-type: none"><li>– In 2016, engage potential responsible parties</li><li>– In 2016, BLM complete cleanup at 4 mines (Spencer and Barbara J Complex)</li><li>– In 2016, USFS complete cleanup at 4 mines (Old La Jara, Taffy, Vallejo, Zia)</li><li>– In 2016, EPA complete assessment on 2 mines and begin cleanup (Sections 35, 36); initiate assessment on 4 mines (Sections 10, 22, 24, 30W)</li><li>– In 2017, complete assessment on 4 mines and begin cleanup (Sections 10, 22, 24, 30W); initiate assessment on 4 mines (Sections 17, 19, 30, 33)</li><li>– In 2019, complete cleanup of 3 mines (Sections 35, 36, Johnny M)</li><li>– In 2020, begin cleanup of 4 mines (Sections 10, 22, 24, 30W)</li><li>– Conduct remedial investigation/feasibility study at Jackpile</li></ul>	



2010 – 2015 Plan		2015 – 2020 Plan	
Goals	Accomplished	Goals	
<u>Former Uranium Mills</u> – Surveillance and maintenance  – Additional groundwater studies	– Inspected and maintained disposal cells (Phillips Mill, Bluewater Mill, L-Bar Mill)  – Demolished all remaining structures at the Rio Algom Mill site  – Installed 10 new monitoring wells at the Bluewater Mill; additional constituents/more frequently sampling of wells at the Bluewater and Rio Algom Mill sites <ul style="list-style-type: none"> <li>• better understanding of hydrology</li> </ul>	– Maintain disposal cells (Phillips Mill, Bluewater Mill, L-Bar Mill) – In 2017, complete groundwater feasibility study for United Nuclear Corporation –Northeast Church Rock site and update the Record of Decision to account for current site conditions – In 2017, complete investigation at Homestake Mill site and issue final groundwater and tailings pile Record of Decision – 2020 NRC license termination at Rio Algom site; handoff to DOE for surveillance and maintenance – 2020 NRC begins handoff transition to DOE	
<u>Residential Areas</u> – Identify contaminated structures – Identify contaminated properties	– Initial mission completed with 900 structures and properties assessed <ul style="list-style-type: none"> <li>• 772 found below action levels, owners informed</li> <li>• 128 found above action levels and cleaned up</li> </ul>		
<u>Public Health Surveillance</u> – Study uranium exposure	– Completed biometric study <ul style="list-style-type: none"> <li>• 6 to 9 times higher uranium in urine than national average</li> </ul>		
<u>Communication</u>	– 4 Community meetings held – 5-Year Plan updated twice	– Clearly communicate ongoing and planned actions/activities – Provide information the community needs	



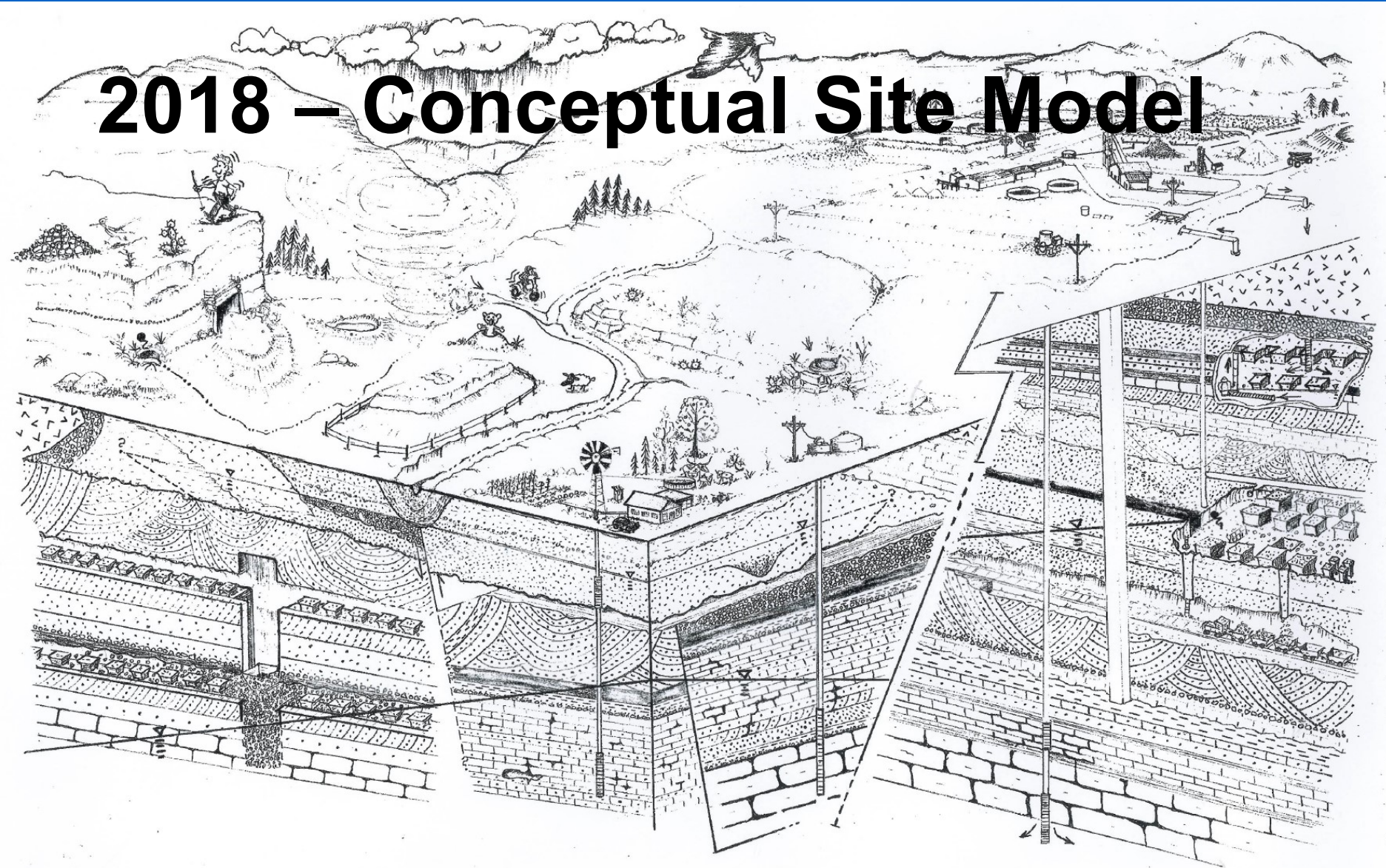






# Goal for Water Sources

## 2018 – Conceptual Site Model



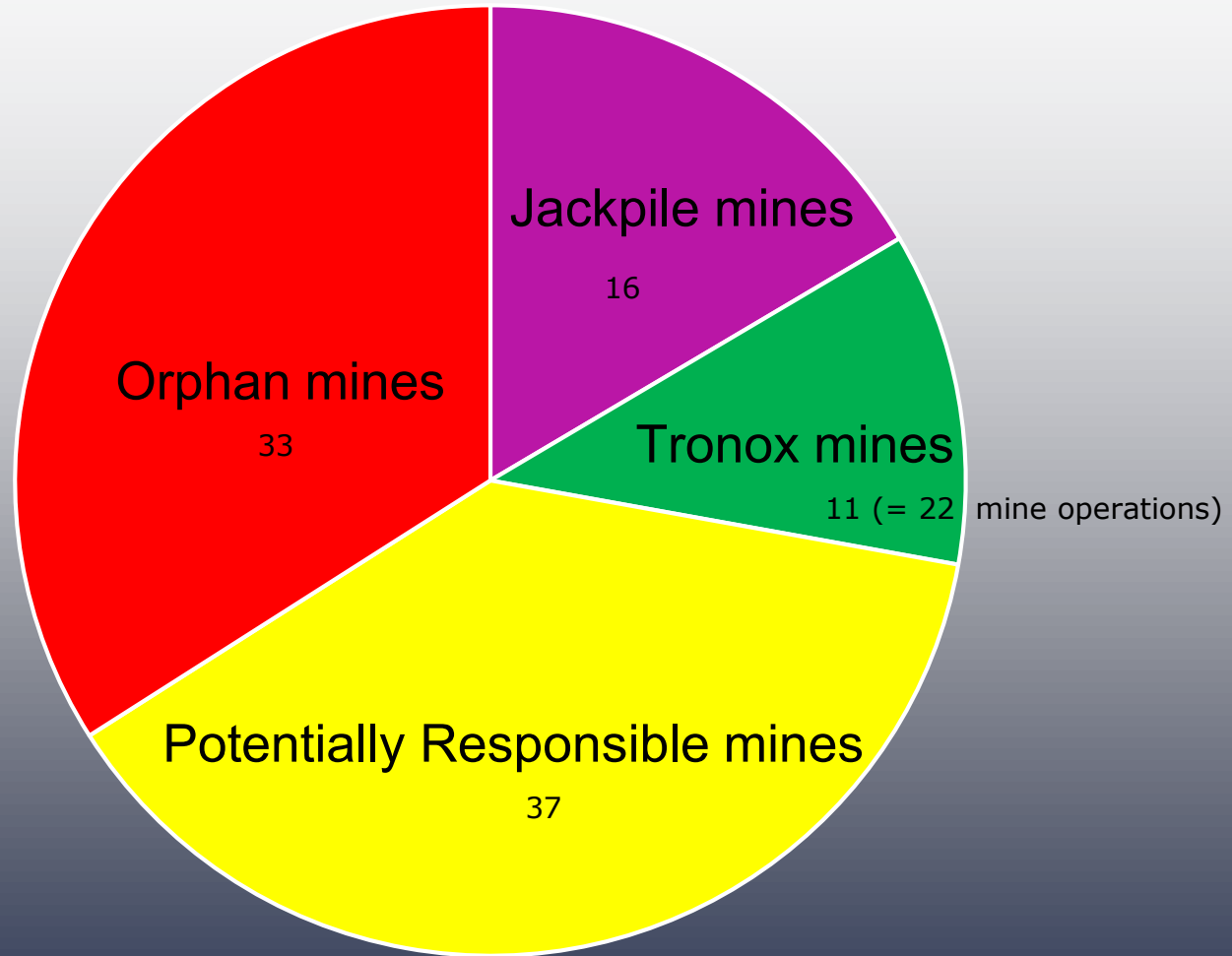


# Grants Mining District





# Grants Mining District Mines - 97





# Goal for Mines

## EPA

- Complete Removal Action at Section 35/36
- Complete Removal Assessments on all Tronox Mines
- Oversee PRP assessments and cleanups
- Conduct RI/FS at Jackpile-Paguete Mine





# Goal for Mines

## BLM

- Complete Reclamation of Spencer Mine
- Complete Reclamation of the Barbara J Complex

## USFS

- Complete Removal Actions at Taffy, Vallejo, Old La Jara, Zia Mines





**Phillips Mill  
DOE**

**Rio Algom Mill  
NRC**

**Bluewater Mill  
DOE**

**Homestake Mill  
NRC**

Mount Taylor

**L-Bar Mill  
DOE**

Grants

Cibola

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35°15'01.89" N 107°34'44.47" W elev 10305 ft

Eye alt 38.45 mi



# Goal for Mills

- 2017 - Update ROD for UNC-NECR
- 2017 - Issue ROD for Homestake
- 2020 - License termination for Rio Algom Mill
- Continue long-term maintenance of mills (Phillips, Bluewater, L-Bar)





# Goals for Communication/Coordination

- Hold community meetings, as needed
- Implement education plan
- Maintain and update website annually
- Maintain FO-OC and Grants Command Post
- Make available TASC and TAG, as needed
- Annual updates to CIP

# 2015 5-Year Plan GMD

## Next Steps

- Oct. 9 – share plan
- Oct. 27 – community meeting
- Nov. – incorporate comments; brief DD
- Dec. – finalize plan





